English Translation of JP-A-11-339076

Column 2, line 7 to column 3, line 20

[0003] A prior art boarding card issuing system utilizing specialized terminals is schematically illustrated in Fig. 2. As shown in Fig. 2, a prior art boarding card issuing system 50 is provided with a host computer 51 provided in a boarding card issuing organization, and a specialized terminal 53 provided in each of user agents connected to the host computer 51 through a telephone line 52 or the like. The specialized terminal 53 is provided with a specialized airfare ticket issuing machine 54 which allows an airfare ticket 56 to be issued when an airfare ticket reservation is carried out by using the specialized terminal 53. Meanwhile, a boarding card issuing machine 55 is provided in each airport and has a deposit slit 55a, which allows the airfare ticket 56 to be deposited into the deposit slit 55a to issue a corresponding boarding card 57.

[0004] In the prior art boarding card issuing system 50, an application for an airfare ticket reservation can be carried out to the host computer 51 by operating the specialized terminal 53. Also, as the host computer 51 receives an appropriate application for an airfare ticket reservation, the airfare ticket reservation becomes effective, so that its reservation information is recorded in the host computer 51 and the airfare ticket 56 is issued via the airfare ticket issuing machine 54 attached to the specialized terminal 53.

[0005] A user takes the airfare ticket 56 to an airport at the departure time, and deposits the airfare ticket 56 into the deposit slit 55a of the boarding card issuing machine 55 of the boarding card issuing organization in the airport. The boarding card issuing machine 55 issues the corresponding boarding card 57 in accordance with the inputted airfare ticket 56.

[0006] An airfare ticket reservation on an individual user

basis by a telephone call is also carried out. This reservation method requires an individual, who reserves airfare tickets, to own (have registered) some credit card.

[0007] An individual who wants to apply an airfare ticket reservation makes a telephone call to the boarding card issuing organization for issuing boarding cards after receiving an airfare ticket reservation. A reservation application is then carried out for desired airfare tickets, and simultaneously the card name, the registered number and the like of the credit card the user owns (have registered) are transmitted. When the boarding card issuing organization copes with the requested reservation application and accepts the reservation application, the airfare ticket reservation becomes effective. At this time, an airfare ticket is issued imaginarily, not practically, so that the individual does not get the airfare ticket itself, however, a fare adjustment is carried out and a predetermined fare is paid from a credit card corporation to the boarding card issuing organization.

[0008] The individual who has applied for the airfare ticket reservation takes the credit card indicated at reservation to the airport at the departure time. The credit card is then inserted into a boarding card issuing machine of the boarding card issuing organization in the airport. The boarding card issuing machine reads the information of the credit card and collates it with previously inputted information of the airfare ticket reservation to issue a boarding card.

[0009]

[Problem to be Solved by the Invention] First, the aforementioned boarding card system 50 of the prior art consists of a specialized terminal 53 provided in each user agent, however, it is not suitable in view of efficient utilization of space to provide a specialized terminal 53 which has no otherwise use. Also, after the specialized terminal 53 is once provided, the maintenance and the like exclusively for the specialized terminal 53

are required, which is a problem in terms of cost and burden. Accordingly, each of the user agents cannot help being extremely cautious in introducing the specialized terminal 53, which limits the spread of the system.
[0010] Meanwhile, since a method of an airfare ticket reservation by using a telephone call is applied to individuals, it is difficult to manage the state of airfare ticket utilization of each of the user agents and also to supply services such as a fare adjustment of each of the user agents. Therefore, the connection between a boarding card issuing corporation and each of the user agents may be weakened, which increases a possibility that the boarding card issuing organization will lose customers in each of the user agents. Also, on a user side in each of the user agents, there is a drawback in that this method cannot be utilized unless a user has a credit card.

column 4, line 13 to column 7, line 23

[0014]
[Mode of Carrying out the Invention] Hereinafter, a carrying-out mode of the present invention will be explained with reference to the drawing. Fig. 1 illustrates a boarding card issuing system 10 utilizing ID information according to the carrying-out mode of the present invention. As shown in Fig. 1, the boarding card issuing system 10 utilizing ID information according to the present carrying-out mode is provided with a host computer 11 provided in a boarding card issuing organization for issuing boarding cards after receiving an airfare ticket reservation, a universal personal computer 13 provided in each user agent and connected to the host computer through a telephone line 12, a boarding card issuing machine 15 provided in each of airports and connected to the host computer 11 through the telephone line 12, and an ID recorded medium 16 where the ID information is recorded.

[0015] In the universal personal computer 13, specialized airfare ticket reservation software 14 is installed and various other types of application software are installed. When the airfare ticket reservation software 14 is driven, the universal personal computer 13 can communicate with the host computer 11, so that the universal personal computer 13 can apply an airfare ticket reservation to the host computer 11. The airfare ticket reservation software 14, for example, is lent free of charge by the boarding card issuing organization to each of the user agents to be set in the user agents so that the airfare ticket reservation can be easily and smoothly carried out.

[0016] The universal personal computer 13 where the airfare ticket reservation software 14 is driven transmits (displays) the information of a user requested airline and ID information related to a user individual and to a user agent to the host computer 11, thus easily and smoothly applying for the airfare ticket reservation (reservation applying function).

[0017] The ID information related to the user individual and the user agent, which is transmitted from the universal personal computer 13 to the host computer 11 at the time of the application for the airfare ticket reservation, is recorded as user ID information in the ID recorded medium 16. The ID recorded medium 16 according to the present carrying-out mode is of an ID card, but its embodiment is not restricted to this.

[0018] On the other hand, the host computer 11 in the boarding card issuing organization makes an airfare ticket reservation effective according to the application for an airfare ticket reservation from the universal personal computer 13 (reservation accepting function). For example, the host computer 11 searches whether or not there is an unoccupied seat in the requested airline according to the airline information transmitted from the universal personal computer 13. When there is such an unoccupied seat, the host computer 11 makes the airfare ticket

reservation effective. When there is no unoccupied seat, the host computer 11 transmits the search result to the universal personal computer 13. Note that the host computer 11 is set such that, when ID information is not correctly transmitted from the universal personal computer 13, even if there is an unoccupied seat in the requested airline, the airfare ticket reservation is not made effective.

[0019] When the airfare ticket reservation is made effective, the host computer 11 is to transmit the effective information of the airfare ticket reservation and the ID information attached to the airfare ticket reservation to the boarding card issuing machine 15 provided in the departure airport of the requested airline (standby command function).

[0020] The boarding card issuing machine 15 in an airport has a deposit slit 15a for depositing (inputting) the ID recorded medium 16 so that, when the ID recorded medium 16 is deposited (inputted) into this deposit slit, the user ID information can be read from the deposited ID recorded medium (ID read function). The read user-ID information and the ID information transmitted from the host computer are then collated with each other (collation function), so that a boarding card 17 based on a corresponding application for an airfare ticket reservation is issued in accordance with the result of the collation (ticket issuing function). Moreover, the fact that the boarding card has been issued is to be transmitted as boarding-card issue result information to the host computer 11 (ticket issue result transmitting function).

[0021] The information that the boarding card 17 has been issued, which was transmitted from the boarding card issuing machine 15 to the host computer 11, is stored in a database within the host computer 11 (information storing function).

[0022] The host computer 11 in the boarding card issuing organization can also calculate the amount of fare in

accordance with the stored ticket-issued information (after-boarding fare adjustment function), calculate the amount of fare of each universal personal computer in each user agent or every user agent (collective fare-adjustment function), and discount at the time of calculating the amount of fare of each of the universal personal computers in each user agent or every user agent (collective fare-adjustment discounting function).

[0023] Next, an operation of the present carrying-out mode having the structure described above will be explained. In the boarding card issuing system 10 utilizing the ID information of the present carrying-out mode, the universal personal computer 13 in each user agent is driven and operated by an operator to drive the airfare ticket reservation software 14 installed in the universal personal computer 13. When the airfare ticket reservation software 14 is driven, the universal personal computer 13 can communicate with the host computer 11.

[0024] The operator then inputs the information of a user requested airline and ID information related to a user individual and the user agent into the universal personal computer 13 to transmit (display) them from the universal personal computer 13 to the host computer 11, thus carrying-out an application for an airfare ticket reservation to the host computer 11. Note that the ID information related to the user individual and the user agent, which is transmitted from the universal personal computer 13 to the host computer 11, is the information recorded as user ID information in the ID recorded medium 16.

[0025] When an application for an airfare ticket reservation from the universal personal computer 13 is received, the host computer 11 in the boarding card issuing organization searches whether or not there is an unoccupied seat in the requested airline according to the airline information transmitted from the universal personal computer 13, for example. When there is an

unoccupied seat, the host computer 11 makes the airfare ticket reservation effective. When there is no unoccupied seat, the host computer 11 transmits the search result to the universal personal computer 13. Note that, when the ID information is not correctly transmitted from the universal personal computer 13, even if there is an unoccupied seat in the airline, the airfare ticket reservation is not established.

[0026] When the airfare ticket reservation is established, the host computer 11 transmits the effective information of the airfare ticket reservation and the ID information attached to the airfare ticket reservation to the boarding card issuing machine 15 provided in the departure airport of the requested airline, thus completing a procedure of the airfare ticket reservation.

[0027] The user who has applied for the airfare ticket reservation takes the ID recorded medium 16, which has recorded the ID information indicated at reservation, to the departure airport. The ID recorded medium 16 is then inserted into the deposit slit 15a of the boarding card issuing machine 15 of the boarding card issuing organization in the related airport.

[0028] The boarding card issuing machine 15 reads the information in the ID recorded medium 16 and collates the read user-ID information with the ID information transmitted from the host computer to issue a boarding card 17 based on a corresponding application for the airfare ticket reservation in accordance with the result of the collation.

[0029] Moreover, the boarding card issuing machine 15 transmits the fact that the boarding card has been issued, to the host computer 11 as boarding-card issue result information. The information that the boarding card has been issued, which is transmitted from the boarding card issuing machine 15 to the host computer 11, is stored in a database within the host computer 11.

[0030] In accordance with a selection in the boarding card

issuing organization, the host computer 11 in the boarding card issuing organization calculates the amount of fare in accordance with the stored ticket-issued information, calculates the amount of fare of each universal personal computer 13 in each user agent or every user agent, or discounts at calculating the amount of fare of each universal personal computer 13 in each user agent or every user agent.

[0031] According to the present carrying-out mode as stated above, each user agent can apply an airfare ticket reservation by using the universal personal computer 13, so that the prior art specialized terminal is not required, thereby dissolving the problem of space for mounting a terminal. Also, with respect to the system installing cost and the system maintenance cost, only the cost related to the universal personal computer 13 and the airfare ticket reservation software 14 are added, so that a remarkable reduction in cost is realized in contrast with the prior art.

[0032] Also, according to the present carrying-out mode, the universal personal computer 13 is mounted in each of the user agents, so that each of the user agents can easily manage the state of the airfare ticket utilization. Especially, since the universal personal computer 13 can drive other application software, various applications can be easily carried out. For example, airfare ticket utilization state data can be read by accounting application software.

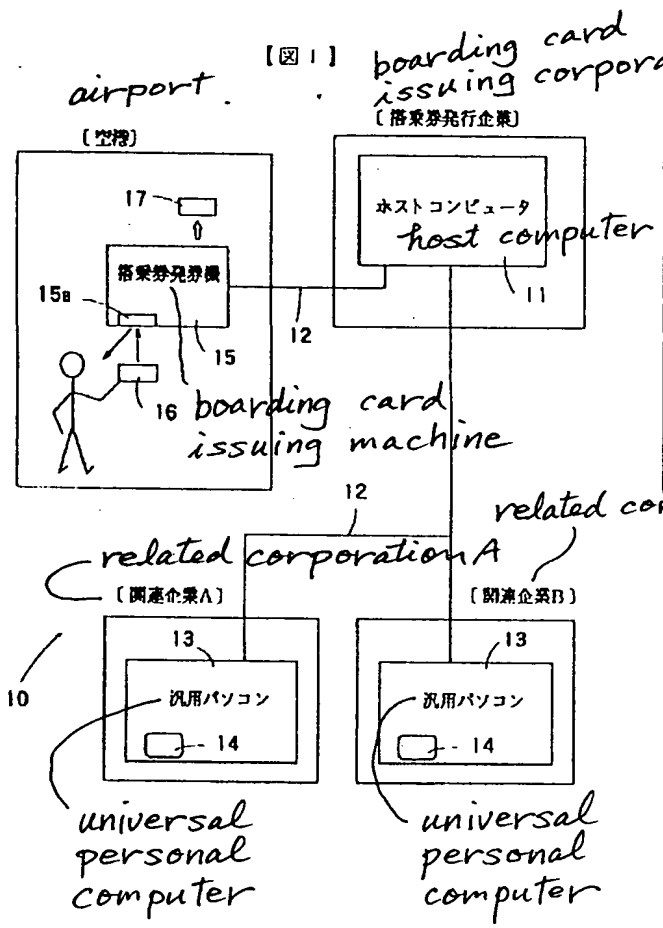
[0033] On the other hand, the boarding card issuing organization can provide a variety of services to each of the user agents by the present carrying-out mode. For example, according to the information of boarding card issued result, it is possible to provide services such as a collective claim of a fare adjustment as deferred payment, a discount service to each of the user agents in proportion to the number of utilization, the total distance of utilization or the like. This allows the

boarding card issuing organization to substantially monopolize the needs of airfare ticket utilization by user agents.

[0034] An airline user need only have the ID recorded medium 16 as an alternative to airfare tickets, so that there is no need for the airline user to register and own a credit card as in the prior art reservation method by a telephone call. Moreover, a fare adjustment procedure is carried out on a user agent, so that there is no need of procedures within agents such as a so-called advance and its statement.

[0035] Incidentally, the universal personal computer 13 has a variety of functions such as a collation function of the state of an airfare ticket reservation as functions associated with the airfare ticket reservation. Also, a variety of services from the boarding card issuing organization can be transmitted from the host computer 11 to the universal personal computer 13.

【図1】


airport
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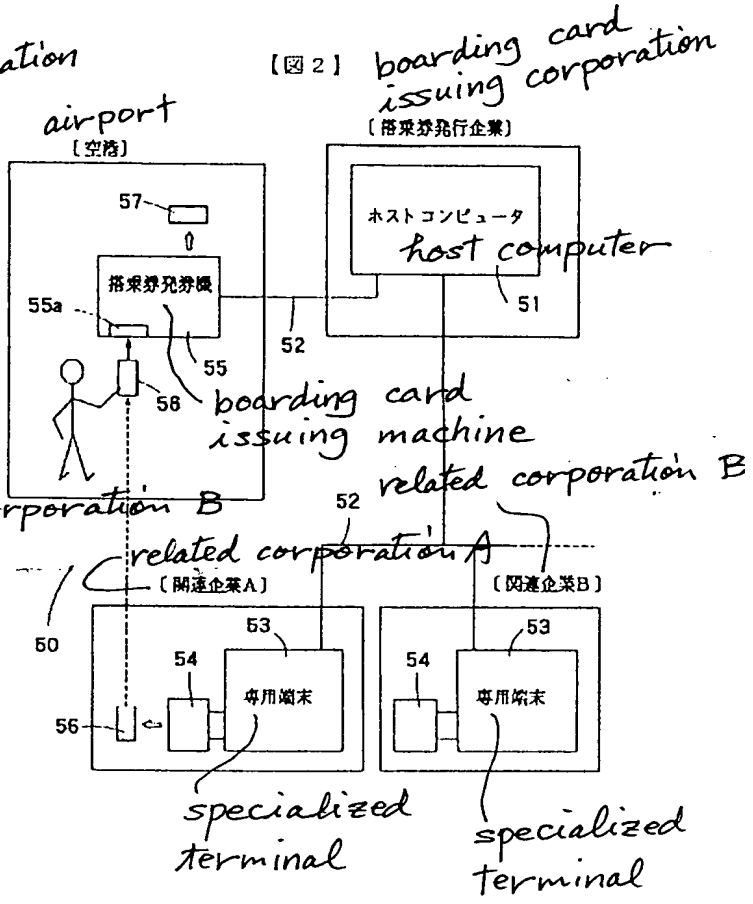
boarding card issuing corporation
【搭乗券発行企業】
ホストコンピュータ
host computer
11
17
搭乗券発券機
15a
15
16
boarding card issuing machine
12
related corporation A
【関連企業A】
related corporation B
【関連企業B】
10
13
汎用パソコン
14
universal personal computer
universal personal computer

【図2】


airport
【空港】
boarding card issuing corporation
【搭乗券発行企業】
ホストコンピュータ
host computer
51
57
搭乗券発券機
55a
55
58
boarding card issuing machine
52
related corporation B
related corporation A
【関連企業A】
【関連企業B】
60
53
54
専用端末
56
specialized terminal
specialized terminal